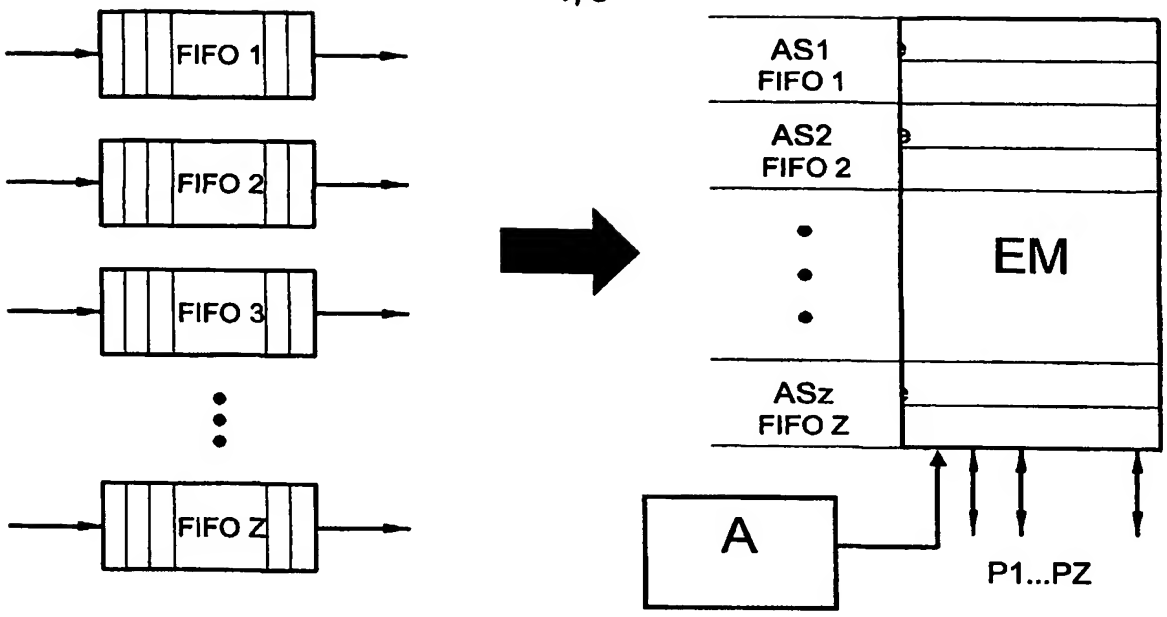
FIFO 1
FIFO 2
FIFO 3
FIFO Z
AS1
FIFO 1
AS2
FIFO 2
EM
ASz
FIFO Z
A
P1...PZ

Fig. 1

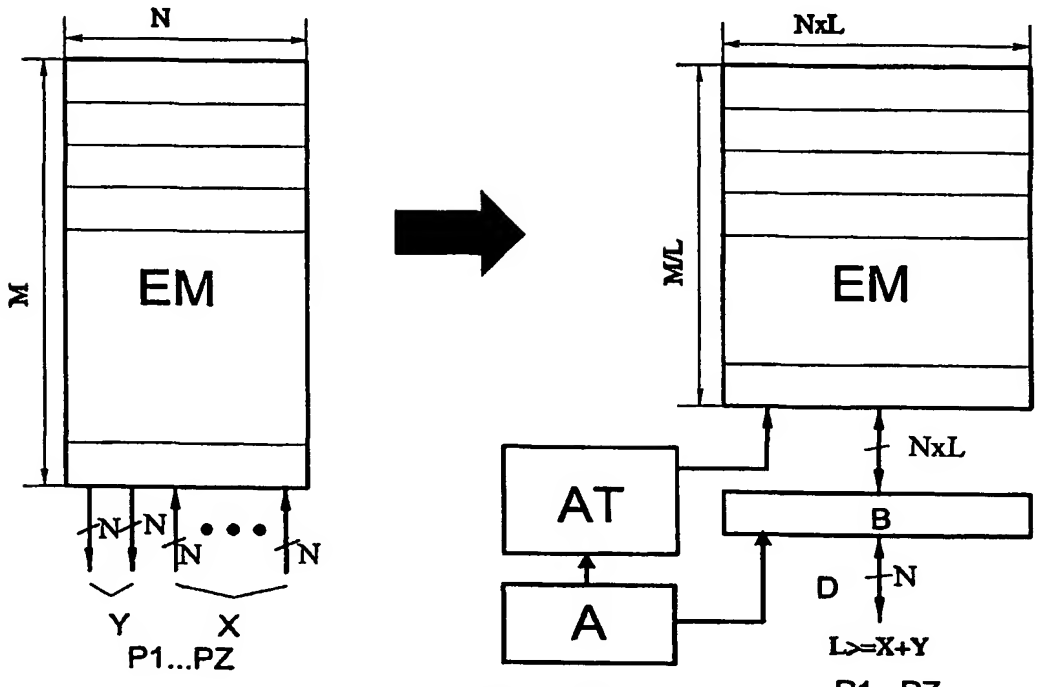
N
M
EM
N
N
N
N
Y
X
P1...PZ
NxL
M/L
EM
NxL
AT
B
D
N
A
L>=X+Y
P1...PZ

Fig. 2

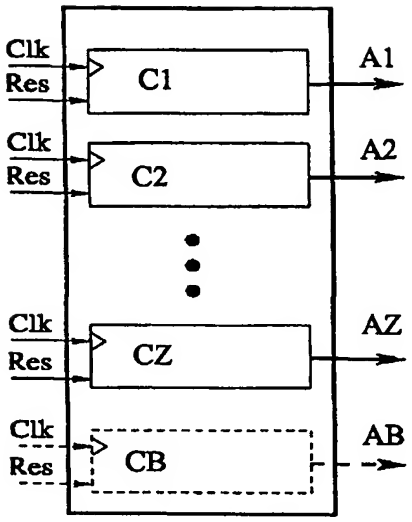
Clk
Res
C1
A1
Clk
Res
C2
A2
Clk
Res
CZ
AZ
Clk
Res
CB
AB

Fig. 3

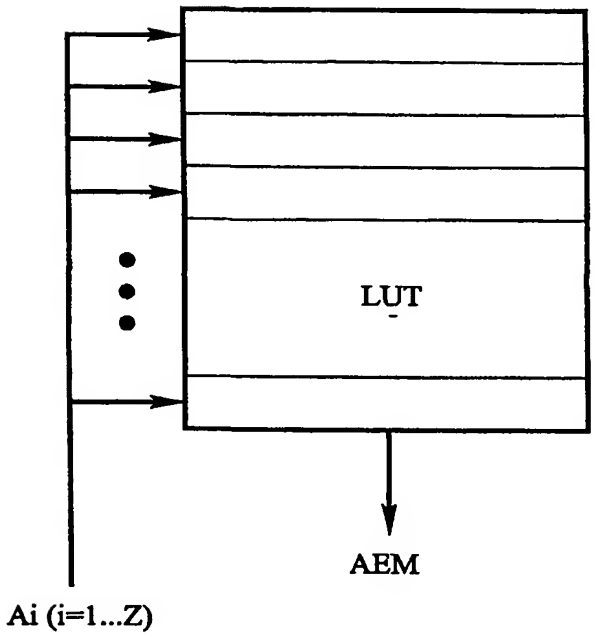
LUT
AEM
Ai (i=1...Z)

Fig. 4

Cycle	Action
0	No access (write 4 samples into align buffer)
1	No access (write 4 samples into align buffer)
2	Write access (write 4 samples into align buffer and copy the align buffer into memory)
3	Read access (transfer 12 samples to the first PRML decoder + write 4 samples into align buffer)
4	Read access (transfer 12 samples to the second PRML decoder + write 4 samples into align buffer)
5	Write access (write 4 samples into align buffer and copy the align buffer into memory)
6	Read access (transfer 12 samples to the third PRML decoder + write 4 samples into align buffer)
7	Read access (transfer 12 samples to the fourth PRML decoder + write 4 samples into align buffer)
8	Write access (write 4 samples into align buffer and copy the align buffer into memory)
9	Read access (transfer 12 samples to the fifth PRML decoder + write 4 samples into align buffer)
10	No access (write 4 samples into align buffer)
11	Write access (write 4 samples into align buffer and copy the align buffer into memory)

Fig. 5

C	W	R	O1	O2	O3
0	L0				
1		L0	L0		
2	L1				
3		(L4)		(L4)	
4	L2				
5		(L7)			(L7)
6	L3				
7		L1	L1		
8	L4				
9		(L5)		(L5)	
10	L5				
11		(L8)			(L8)
12	L6				
13		L2	L2		
14	L7				
15		L3		L3	
16	L8				
17		L6			L6

Fig. 6